



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/519,466	05/25/2005	Gerard Jaulent	3978-16	2674

30448 7590 03/18/2008  
AKERMAN SENTERFITT  
P.O. BOX 3188  
WEST PALM BEACH, FL 33402-3188

EXAMINER
----------

ST CLAIR, ANDREW D

ART UNIT	PAPER NUMBER
----------	--------------

3749

MAIL DATE	DELIVERY MODE
-----------	---------------

03/18/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/519,466

Applicant(s)

JAULENT, GERARD

Examiner

Andrew St.Clair

Art Unit

3749

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period **will** apply and **will** expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply **will**, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 16,18-29 and 31-33 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 16,18-29 and 31-33 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 December 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 8/5/2005.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date: \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_.

## **DETAILED ACTION**

### ***Claim Objections***

At least claims 16 and 31-33 have reference numbers in the body of the claim but appearing without parenthesis. All reference numbers should be enclosed within parentheses to avoid confusion with other numbers or characters which may appear in the claims. See MPEP 608.1(m).

### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 16, 18-29, 31-33 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

With respect to claim 16, the recitation of “wherein the cone (200) deploys...” is unclear and renders the claim indefinite. The recitation is without proper antecedent basis because no recitation of “a cone” precedes it.

With respect to all of the claims, it appears that interchangeable terminology is used, resulting in unclear scope of the claims. Claim terminology should which refers the same structure should always be consistent. For instance, if a structure is introduced as “A movable diffusion cone” it should only be referred to subsequently as “said movable diffusion cone” or “the movable diffusion cone;” terminology should never be truncated or changed such that the same cone is later referred to as “the cone,” “the diffusion cone,” or “said movable cone,” as this would lend confusion as to how many cones are claimed. This problem also extends to the

Art Unit: 3749

recitation of "a control rod," subsequently referred to only as "said rod." Applicant should correct these problems and also thoroughly check the claims for identical problems in the recitation of other claimed structure.

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 16, 18-29, and 31-33 are rejected under 35 U.S.C. 102(b) as being anticipated by Kopp (3,460,763).

With respect to claim 16, Kopp discloses a gas burner type combustion device, the burner comprising a main body having: (1) an upper end 10 fitted with a gas inlet in the form of a coupling 11 and (2) a lower end (see fig. 1, lower end is proximate to elements 42, 50) which opens out; wherein the cone (comprised of blades 50; col. 1, ln. 33-35; "expandable truncated cone shell preferably made of spring steel,...") deploys or retracts (see fig. 1 and fig. 3, the expanding and collapsing is considered to read on "deploys or retracts") so that the diameter of the base (base proximate to lower end) of the cone changes during the operating of the burner according to the usage of the burner; a movable diffusion cone (comprised of blades 50; col. 1, ln. 33-35; "expandable truncated cone shell preferably made of spring steel,...") located at the lower end, the diffusion cone having a tip located at least upstream from a flame creation zone, wherein the movement of the cone permits the variation in strength of the flame.

With respect to the recitations of “which projects a mix of air and gas inflamed at the outlet of a pipe” and “so that the flame takes on the deployed or retracted shape of the cone whilst in operation,” these statements are considered functional claim limitations. With respect to the recitations of “to allow an inflamed gas and air mix to escape to create a flame” and “to ensure the bursting of the air and gas mix,” these statements are considered intended use. Both functional claim limitations and intended use statements are considered to be anticipated by the prior art when the prior art structure is capable of performing the use or function. In the present case the apparatus of Kopp is considered capable of performing the recited use and functions; Kopp discloses that the nozzle assembly 20 is an afterburner, projecting engine exhaust gases (col. 1, ln. 24; col. 2, ln. 12), it is thus considered inherent that flames are projecting from the nozzle. The flames are considered to take on the "shape of the cone" because they would at least have substantially the same diameter of the base of the cone when exiting the end.

With respect to claim 18, Kopp further discloses the claimed subject matter wherein the cone further comprises a lower part (proximate to lower end), wherein the lower part includes a plurality of blades 50 articulated in relation to the tip so as to move from a deployed position to a retracted position and vice versa. (see figs. 1, 3).

With respect to claim 19, Kopp further discloses the claimed subject matter wherein the opening and closing of the cone as well as its relative displacement in relation to the body of the burner are actuated by the relative controlled displacements of at least one control rod 60.

With respect to claim 20, Kopp further discloses the claimed subject matter further comprising a spacer 42 located on the inside of the cone and constantly touching at least one of a plurality of blades, wherein the spacer is connected to said control rod whose actuation ensures

Art Unit: 3749

the displacement of said spacer and the deployment or retraction of said blades. (see fig. 1; col. 2, ln. 40-46).

With respect to claim 21, Kopp further discloses the claimed subject matter wherein the spacer is in helical connection with said rod (spacer 42 is considered to be in helical connection with the rod in that it wraps around the rod, forming a spiral) whose rotation ensures the displacement of said spacer on the inside of the cone.

With respect to claim 22, Kopp further discloses the claimed subject matter wherein the blades overlap, one blade over the other irrespective of their position. (see fig. 1, the blades appear to overlap proximate to gear 80, even when in expanded position).

With respect to claim 23, Kopp further discloses the claimed subject matter wherein the cone co-operates with a fixed nozzle tip located at the lower end of the burner. (tip of sheet metal shell 30, proximate to lower end.)

With respect to claim 24, Kopp further discloses the claimed subject matter, further comprising a bell cover 30 coaxial to the axis of diffusion of the flames, wherein the bell cover is constituted by an external cylindrical surface and a horizontal surface (see fig. 1). With respect to the recitations of "of the type used for thermal weed killing" and "to maintain the hot air above the contact point of the ground with the flames," this is considered intended use. A recitation of the intended use of the claimed invention must result in a definite structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use it is considered to disclose the claim limitation. With respect to the recitation of

“with the purpose of maintaining a safety perimeter around the burner,” the purpose of a structural component is not considered to have patentable weight.

With respect to claim 25, Kopp further discloses the claimed subject matter wherein said bell cover is rotary mounted in a moveable manner in relation to the body of the burner along the vertical axis of the burner. (Said bell cover is considered to be “rotary mounted” in that it is mounted with rotary components such as swivel nozzle 10 and gear 82, said components being movable relative to the body of the burner. It appears from the drawings that applicant may intend to claim that the bell cover itself is rotatable around the vertical axis; if so, such language should be clearly articulated in the claims.)

With respect to claim 26, Kopp further discloses the claimed subject matter, wherein the burner is associated to at least one wheel 82 by means of an arm 60 itself swiveling at least around the vertical axis defined by the burner. (arm 60 is considered to swivel in that it moves in toward the vertical axis of the burner when the blades retract inward. It is swiveling “around” the vertical axis in that it is proximate to the vertical axis). With respect to the recitation of “of the type used for thermal weed killing,” this is considered intended use.

With respect to claim 27, Kopp further discloses the claimed subject matter, wherein the burner further comprises a protector 71 located at the lower end. (bearing 71 is considered to be a protector because it protects arm 60 from frictional wear.) With respect to the recitation of “of the type used for thermal weed killing,” this is considered intended use.

With respect to claim 28, Kopp further discloses the claimed subject matter wherein the fixed nozzle tip and the diffusion cone take a different conical shape or a different slope. (see

fig. 1, fixed nozzle tip has an interior truncated conical shape of larger diameter than the exterior truncated conical shape of the cone.)

With respect to claim 29, Kopp further discloses the claimed subject matter wherein the upper end of the body of the burner is constituted an at least partially spherical member 82, 92 which comprises openings. (gears 82 and 92 are considered to be “at least partially spherical” because they have spherical or circular cross sections. They each have an opening in the center through which the inflamed exhaust passes from swivel nozzle 10 through the nozzle.) The recitation of “to allow at least the injection of gas and the intake of air” is considered intended use.

With respect to claim 31, Kopp discloses all of the claimed subject matter, as discussed in the rejection of claim 26. In other words, all of the limitations in claim 31 are incorporated in claim 26, thus claim 31 is anticipated for the same reasons discussed above.

With respect to claim 32, Kopp discloses all of the claimed subject matter, as discussed in the rejection of claim 29. In other words, all of the limitations in claim 32 are incorporated in claim 29, thus claim 32 is anticipated for the same reasons discussed above.

With respect to claim 33, Kopp discloses all of the claimed subject matter, as discussed in the rejection of claim 25. In other words, all of the limitations in claim 33 are incorporated in claim 25, thus claim 33 is anticipated for the same reasons discussed above.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew St.Clair whose telephone number is 571-270-3513. The examiner can normally be reached on Monday - Friday, 8 a.m. - 6 p.m..



Art Unit: 3749

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steve McAllister can be reached on 571-272-6785. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Andrew St.Clair/  
Examiner, Art Unit 3749

/Steven B. McAllister/  
Supervisory Patent Examiner, Art Unit 3749